

**A new species of the clearwing moth genus *Trichocerota*  
(Lepidoptera, Sesiidae) from Yakushima Island, Japan**

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**Abstract** A new species, *Trichocerota yakushimaensis* Arita, is described from Yakushima Island and its host-plant, *Rubus sieboldii* Blume, Rosaceae, is recorded.

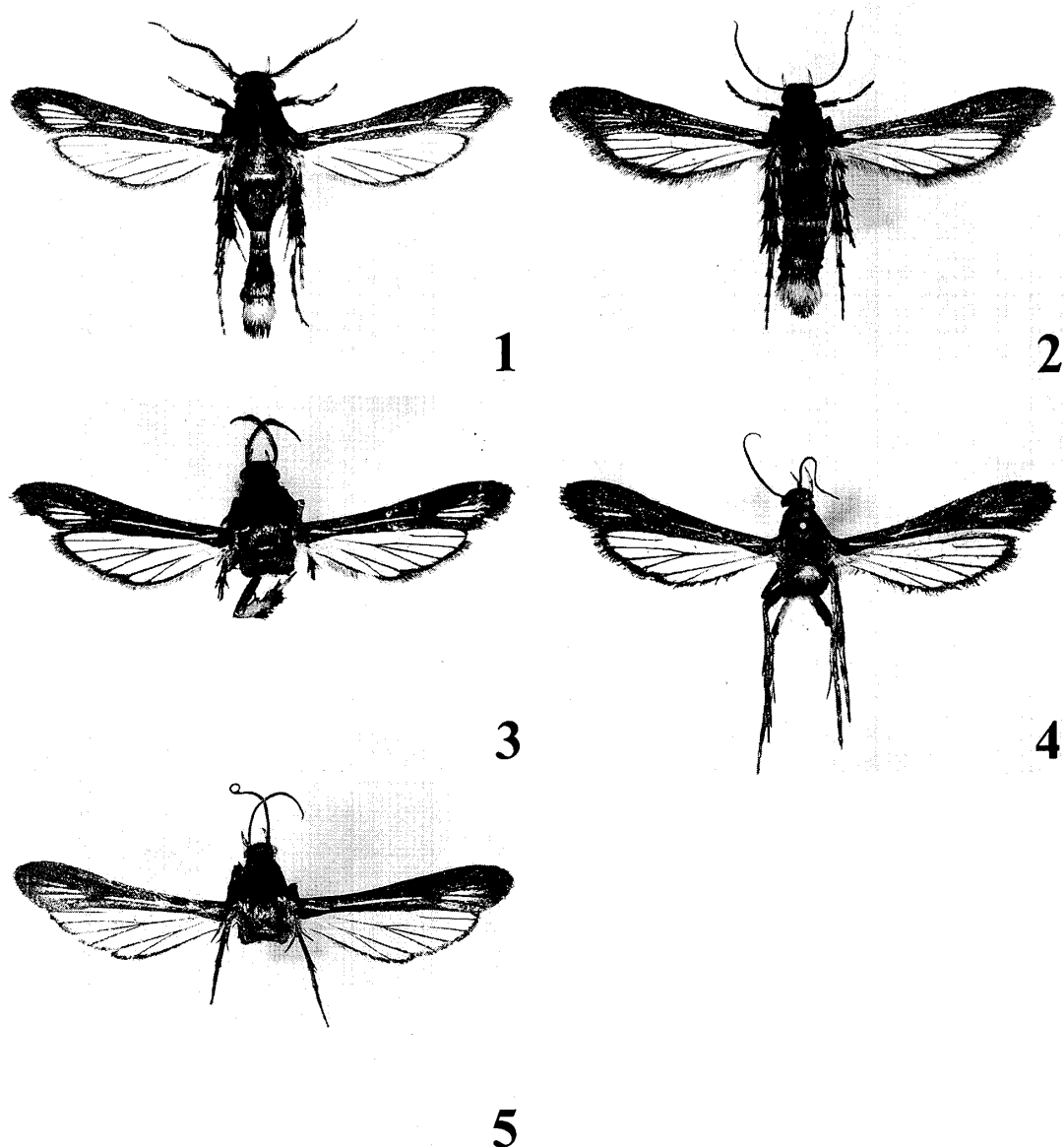
**Key words** Lepidoptera ; Sesiidae ; *Trichocerota yakushimaensis* Arita, sp. nov. ; host-plant ; *Rubus sieboldii*.

***Trichocerota yakushimaensis* sp. n. (Figs. 3-7)**

♂ and ♀. Alar expanse 19-26 mm. Head with vertex and frons blackish with a bluish gloss. Occipital fringe white. Antenna black ; ventral side whitish yellow, entirely in male and apical half in female. Labial palpus slender ; basal segment brushy, white ; median segment white, with apical 1/3 blackish-brown ; terminal segment blackish-brown on outer side and white on inner side. Patagium and thorax blackish-brown with a purplish gloss ; posterior margin of metathorax with long white setaceous scales, tipped with blackish-brown laterally. Fore wing blackish-brown with a purplish gloss ; a very long longitudinal hyaline stripe in cell from near base of wing to almost end of cell, its base with a small and long yellow patch ; in male three external hyaline stripes among veins  $M_2$ - $Cu_2$ , the upper two being long, and the lower one very small and narrow, indistinct ; in female two external hyaline stripes between  $M_2$ - $Cu_1$ , the upper one being indistinct usually or rarely absent ; cilia dark fuscous. Hind wing hyaline ; veins and narrow margins dark fuscous ; discocellular without scales ; cilia greyish fuscous, on dorsum white. Fore leg having coxa blackish-brown with basal half white ; femur blackish-brown, with apical half yellow beneath ; tibia and tarsus blackish brown, mixed with yellow scales on upper side. Mid leg with coxa, femur, tibia and tarsus blackish-brown ; femur yellowish white at distal end. Hind leg blackish-brown ; coxal apical half and femoral distal end white ; tibia white on inner side, with white and black long scale-like tufts at middle and distal end ; tarsus with basal segment white and the remaining segments yellow on inner side. Abdomen with dorsal side blackish-brown with a bluish gloss ; fourth and fifth segments with a respective yellow band anteriorly ; anal tuft blackish-brown, medially with whitish yellow ; ventral side blackish-brown ; fourth and fifth segments whitish yellow.

Male genitalia (Fig. 6a-d). Uncus very long, narrow, with apical half slightly expanded, sparsely clothed with short hairs on dorsal part. Tegumen rather broad dorsally, forming long, lateral arms. Tuba analis large broad. Saccus large, wide and curved. Valva rounded, sparsely clothed with rather long hairs on dorsal part and with short hairs on apical part. Aedeagus extremely long and slender, more than twice as long as valva ; apex sharply edged and pointed downward ; coecum penis remarkably long, narrow.

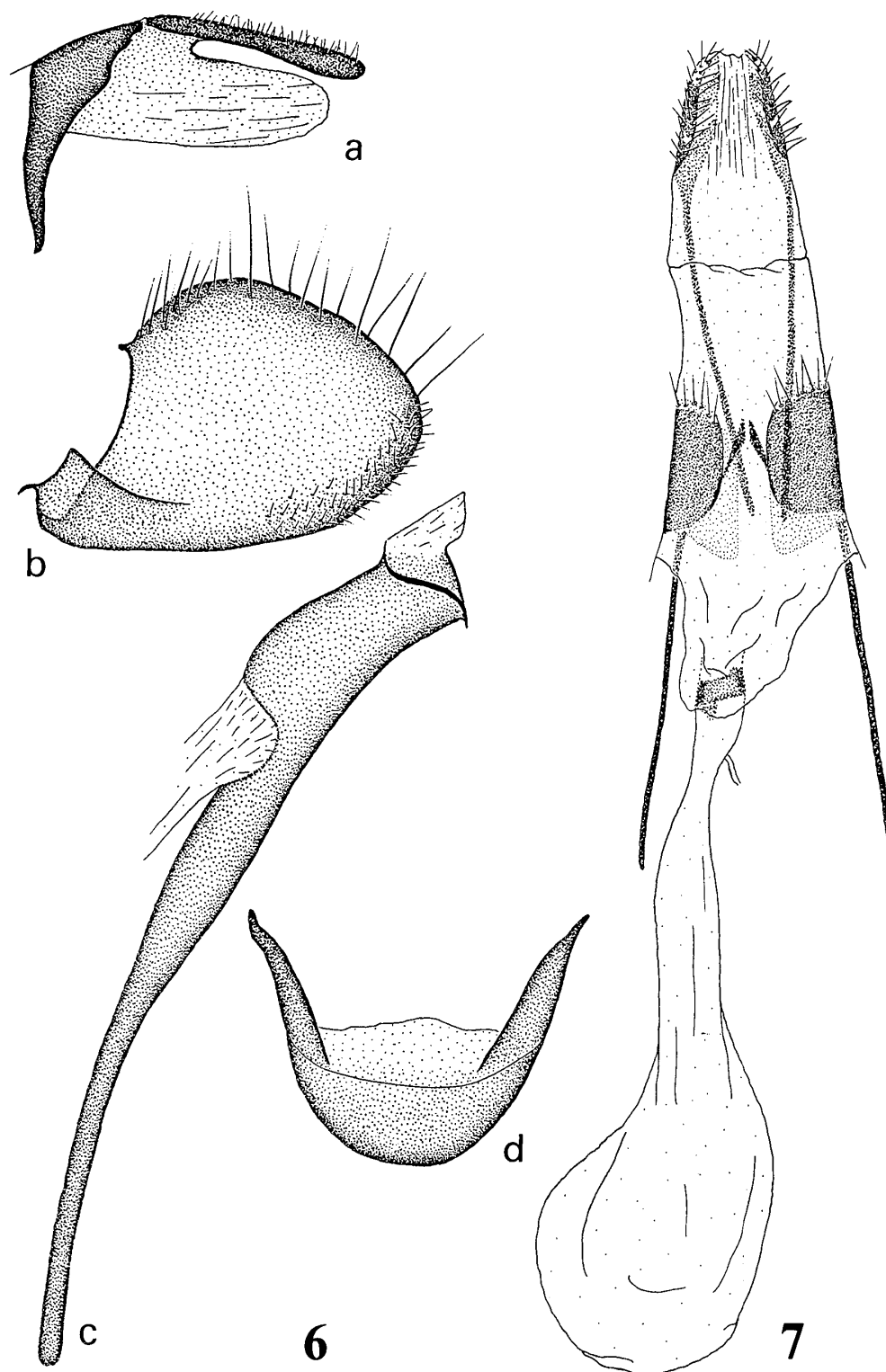
Female genitalia (Fig. 7). Papilla analis rather broad, moderately long. Postapophysis and antapophysis long, almost equal in length. Antrum very short, banded. Ductus bursae short, thick. Corpus bursae ovate, without signum.



Figs. 1-5. Adults of *Trichocerota* species. 1. *Trichocerota constricta* (Butler), male. 2. *Ditto*, female. 3. *T. yakushimaensis* sp. n., holotype, male. 4-5. *Ditto*, paratypes, females.

Holotype. ♂, Japan, Kyushu, Yakushima I., Onoaida, 19. IX. 1987, Y. Arita leg., genitalia on slide no. 1464 YA, in the collection of the Zoological Laboratory, Meijo University.

Paratypes: 1 ♀, Yakushima I., Miyanoura, 22. IX. 1978, Y. Arita leg., genitalia on slide no. 1468 YA; 1 ♀, Yakushima I., Shiratani, 17. IX. 1978, Y. Arita leg., genitalia on slide no. 1467 YA; 5 ♀, Yakushima I., Miyanoura, 22-23. IX. 1988, Y. Arita leg., genitalia on slide no. 1504 YA; 1 ♂ 7 ♀, Yakushima I., Shiratani-rindo, emerged 15. VIII-11. IX. 1992, ex *Rubus sieboldii*, N. Okimoto leg.; all in the collection of the Zoological Laboratory, Meijo University.



Figs. 6-7. *Trichocerota yakushimaensis* sp. n., male and female genitalia. 6. Male genitalia, holotype (a : uncus and tegumen, b : valva, c : aedeagus ; d : saccus). 7. Female genitalia, paratype, genitalia on slide no. 1462 YA.

Host-plant : *Rubus sieboldii* Blume (Rosaceae).

Remarks. As shown in Figs. 1-5, this new species is very similar in maculation to *T. constricta* (Butler, 1878), from Honshu and Kyushu, but differs from it in the fore wing of male with the external hyaline stripes being three instead of four. In the male genitalia the tegumen is broader and shorter than that of *T. constricta*.

## 摘 要

屋久島からのヒメスカシバ属 (*Trichocerota*) の一新種 (有田 豊)

屋久島からムナブトヒメスカシバ *Trichocerota constricta* Butler (Figs. 1-2) に非常によく似たスカシバガが採集された。本州産のムナブトヒメスカシバと比較したところ、前翅外方の透明紋に差異があり新種ヤクシマヒメスカシバ (新称) *T. yakushimaensis* (Figs. 3-7) として記載した。ムナブトヒメスカシバの雄では前翅外方の透明紋は4紋 (Fig. 1) であるがヤクシマヒメスカシバでは3紋 (Fig. 3) である。雌では1紋から3紋までと変異があり (Figs. 4, 5) 区別は困難である。雄交尾器 (Fig. 6) は tegumen がムナブトヒメスカシバに比べて幅広く短い。本新種はハウロクイチゴの生育している山道で採集され、このイチゴに産卵しているのが観察された。さらにハウロクイチゴの茎より1♂7♀が羽化した。これに対してムナブトヒメスカシバの食草はノイバラである。

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